Werner E G MÃ¼ller

List of Publications by Year
in descending order

235 papers	9,051 citations	34105 52 h-index	66911 78 g-index
242 all docs	242 docs citations	242 times ranked	6263 citing authors

#	Article	IF	Citations
1	Acceleration of chronic wound healing by bio-inorganic polyphosphate: <i>In vitro</i> studies and first clinical applications. Theranostics, 2022, 12, 18-34.	10.0	21
2	3D bioprinting of tissue units with mesenchymal stem cells, retaining their proliferative and differentiating potential, in polyphosphate-containing bio-ink. Biofabrication, 2022, 14, 015016.	7.1	12
3	Prenylated cyclohexene-type meroterpenoids and sulfur-containing xanthones produced by Pseudopestalotiopsis theae. Phytochemistry, 2022, 197, 113124.	2.9	6
4	Inorganic Polymeric Materials for Injured Tissue Repair: Biocatalytic Formation and Exploitation. Biomedicines, 2022, 10, 658.	3.2	5
5	Polyphosphate in Antiviral Protection: A Polyanionic Inorganic Polymer in the Fight Against Coronavirus SARS-CoV-2 Infection. Progress in Molecular and Subcellular Biology, 2022, , 145-189.	1.6	4
6	Induction of ambuic acid derivatives by the endophytic fungus Pestalotiopsis lespedezae through an OSMAC approach. Tetrahedron, 2021, 79, 131876.	1.9	4
7	Caged Dexamethasone/Quercetin Nanoparticles, Formed of the Morphogenetic Active Inorganic Polyphosphate, are Strong Inducers of MUC5AC. Marine Drugs, 2021, 19, 64.	4.6	14
8	The therapeutic potential of inorganic polyphosphate: A versatile physiological polymer to control coronavirus disease (COVID-19). Theranostics, 2021, 11, 6193-6213.	10.0	16
9	Polyphosphate Reverses the Toxicity of the Quasi-Enzyme Bleomycin on Alveolar Endothelial Lung Cells In Vitro. Cancers, 2021, 13, 750.	3.7	10
10	Fusaristatins Dâ€"F and (7S,8R)-(â^')-chlamydospordiol from Fusarium sp. BZCB-CA, an endophyte of Bothriospermum chinense. Tetrahedron, 2021, 85, 132065.	1.9	3
11	Aged Mice Devoid of the M3 Muscarinic Acetylcholine Receptor Develop Mild Dry Eye Disease. International Journal of Molecular Sciences, 2021, 22, 6133.	4.1	11
12	Polyphosphate (PolyP) for alveolar cleft repair: study protocol for a pilot randomized controlled trial. Trials, 2021, 22, 393.	1.6	3
13	An unexpected biomaterial against SARS-CoV-2: Bio-polyphosphate blocks binding of the viral spike to the cell receptor. Materials Today, 2021, 51, 504-524.	14.2	8
14	Triple-target stimuli-responsive anti-COVID-19 face mask with physiological virus-inactivating agents. Biomaterials Science, 2021, 9, 6052-6063.	5.4	10
15	Amplified morphogenetic and bone forming activity of amorphous versus crystalline calcium phosphate/polyphosphate. Acta Biomaterialia, 2020, 118, 233-247.	8.3	32
16	The inorganic polymer, polyphosphate, blocks binding of SARS-CoV-2 spike protein to ACE2 receptor at physiological concentrations. Biochemical Pharmacology, 2020, 182, 114215.	4.4	51
17	Biomimetic routes to micro/nanofabrication. , 2020, , 83-113.		1
18	The biomaterial polyphosphate blocks stoichiometric binding of the SARS-CoV-2 S-protein to the cellular ACE2 receptor. Biomaterials Science, 2020, 8, 6603-6610.	5.4	23

#	Article	IF	Citations
19	Biomimetic Alginate/Gelatin Cross-Linked Hydrogels Supplemented with Polyphosphate for Wound Healing Applications. Molecules, 2020, 25, 5210.	3.8	18
20	Azacoccones F-H, new flavipin-derived alkaloids from an endophytic fungus Epicoccum nigrum MK214079. FÃ¬toterapÃ¬Â¢, 2020, 146, 104698.	2.2	12
21	Nanoparticle-directed and ionically forced polyphosphate coacervation: a versatile and reversible coreâ€“shell system for drug delivery. Scientific Reports, 2020, 10, 17147.	3.3	18
22	Morphogenetic (Mucin Expression) as Well as Potential Anti-Corona Viral Activity of the Marine Secondary Metabolite Polyphosphate on A549 Cells. Marine Drugs, 2020, 18, 639.	4.6	25
23	A physiologically active interpenetrating collagen network that supports growth and migration of epidermal keratinocytes: zinc-polyP nanoparticles integrated into compressed collagen. Journal of Materials Chemistry B, 2020, 8, 5892-5902.	5.8	12
24	Amorphous Polyphosphate and Caâ€Carbonate Nanoparticles Improve the Selfâ€Healing Properties of both Technical and Medical Cements. Biotechnology Journal, 2020, 15, e2000101.	3.5	6
25	Polyketide Derivatives from Mangrove Derived Endophytic Fungus Pseudopestalotiopsis theae. Marine Drugs, 2020, 18, 129.	4.6	22
26	Didymellanosine, a new decahydrofluorene analogue, and ascolactone C from <i>Didymella</i> sp. IEA-3B.1, an endophyte of <i>Terminalia catappa</i>. RSC Advances, 2020, 10, 7232-7240.	3.6	7
27	Self-Healing Properties of Bioinspired Amorphous CaCO3/Polyphosphate-Supplemented Cement. Molecules, 2020, 25, 2360.	3.8	10
28	A new depsidone derivative from mangrove sediment derived fungus <i>Lasiodiplodia theobromae</i>. Natural Product Research, 2019, 33, 2215-2222.	1.8	19
29	Expanding the chemical diversity of an endophytic fungus <i>Bulgaria inquinans</i>, an ascomycete associated with mistletoe, through an OSMAC approach. RSC Advances, 2019, 9, 25119-25132.	3.6	22
30	Brominated Azaphilones from the Sponge-Associated Fungus <i>Penicillium canescens</i> Strain 4.14.6a. Journal of Natural Products, 2019, 82, 2159-2166.	3.0	41
31	Biologization of Allogeneic Bone Grafts with Polyphosphate: A Route to a Biomimetic Periosteum. Advanced Functional Materials, 2019, 29, 1905220.	14.9	14
32	Induction of cryptic metabolites of the endophytic fungus <i>Trichocladium</i> sp. through OSMAC and co-cultivation. RSC Advances, 2019, 9, 27279-27288.	3.6	20
33	Cuprous oxide nanoparticles reduces hypertrophic scarring by inducing fibroblast apoptosis . International Journal of Nanomedicine, 2019, Volume 14, 5989-6000.	6.7	26
34	Utilization of metabolic energy in treatment of ocular surface disorders: polyphosphate as an energy source for corneal epithelial cell proliferation. RSC Advances, 2019, 9, 22531-22539.	3.6	3
35	Transformation of Construction Cement to a Self-Healing Hybrid Binder. International Journal of Molecular Sciences, 2019, 20, 2948.	4.1	3
36	Amorphous polyphosphate nanoparticles: application of the morphogenetically active inorganic polymer for personalized tissue regeneration. Journal Physics D: Applied Physics, 2019, 52, 363001.	2.8	6

#	ARTICLE	IF	CITATIONS
37	Indole Diterpenoids from an Endophytic <i>Penicillium</i> sp.. Journal of Natural Products, 2019, 82, 1412-1423.	3.0	45
38	Sesquiterpenoids from the Endophytic Fungus <i>Rhinocladiella similis</i>. Journal of Natural Products, 2019, 82, 1055-1062.	3.0	31
39	New Acyclic Cytotoxic Jasplakinolide Derivative from the Marine Sponge Jaspis splendens. Marine Drugs, 2019, 17, 100.	4.6	13
40	Cryptic Secondary Metabolites from the Sponge-Associated Fungus Aspergillus ochraceus. Marine Drugs, 2019, 17, 99.	4.6	32
41	Calcium Polyphosphate Nanoparticles Act as an Effective Inorganic Phosphate Source during Osteogenic Differentiation of Human Mesenchymal Stem Cells. International Journal of Molecular Sciences, 2019, 20, 5801.	4.1	16
42	Inorganic Polyphosphates As Storage for and Generator of Metabolic Energy in the Extracellular Matrix. Chemical Reviews, 2019, 119, 12337-12374.	47.7	107
43	Polyphosphate, the physiological metabolic fuel for corneal cells: a potential biomaterial for ocular surface repair. Biomaterials Science, 2019, 7, 5506-5515.	5.4	6
44	In Situ Polyphosphate Nanoparticle Formation in Hybrid Poly(vinyl alcohol)/Karaya Gum Hydrogels: A Porous Scaffold Inducing Infiltration of Mesenchymal Stem Cells. Advanced Science, 2019, 6, 1801452.	11.2	28
45	Biomimetic transformation of polyphosphate microparticles during restoration of damaged teeth. Dental Materials, 2019, 35, 244-256.	3.5	15
46	The phosphoanhydride bond: one cornerstone of life. Biochemist, 2019, 41, 22-27.	0.5	9
47	Amorphous polyphosphate, a smart bioinspired nano-/bio-material for bone and cartilage regeneration: towards a new paradigm in tissue engineering. Journal of Materials Chemistry B, 2018, 6, 2385-2412.	5.8	81
48	Collagenâ€inducing biologization of prosthetic material for hernia repair: Polypropylene meshes coated with polyP/collagen. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 2109-2121.	3.4	15
49	Inorganic polyphosphate induces accelerated tube formation of HUVEC endothelial cells. Cellular and Molecular Life Sciences, 2018, 75, 21-32.	5.4	32
50	Role of ATP during the initiation of microvascularization: acceleration of an autocrine sensing mechanism facilitating chemotaxis by inorganic polyphosphate. Biochemical Journal, 2018, 475, 3255-3273.	3.7	28
51	Influence of Altered Microbes on Soil Organic Carbon Availability in Karst Agricultural Soils Contaminated by Pb-Zn Tailings. Frontiers in Microbiology, 2018, 9, 2062.	3.5	8
52	Transformation of Amorphous Polyphosphate Nanoparticles into Coacervate Complexes: An Approach for the Encapsulation of Mesenchymal Stem Cells. Small, 2018, 14, e1801170.	10.0	47
53	Amorphous, Smart, and Bioinspired Polyphosphate Nano/Microparticles: A Biomaterial for Regeneration and Repair of Osteo-Articular Impairments In-Situ. International Journal of Molecular Sciences, 2018, 19, 427.	4.1	22
54	Lanthanum-containing bioparticles are associated with the influence of lanthanum on high phosphate mediated bone marrow stromal cells viability. BioMetals, 2018, 31, 771-784.	4.1	14

#	Article	IF	Citations
55	Biocalcite and Carbonic Acid Activators. Progress in Molecular and Subcellular Biology, 2017, 55, 221-257.	1.6	0
56	Electrospinning of Bioactive Wound-Healing Nets. Progress in Molecular and Subcellular Biology, 2017, 55, 259-290.	1.6	13
57	New Target Sites for Treatment of Osteoporosis. Progress in Molecular and Subcellular Biology, 2017, 55, 187-219.	1.6	5
58	Fabrication of a new physiological macroporous hybrid biomaterial/bioscaffold material based on polyphosphate and collagen by freeze-extraction. Journal of Materials Chemistry B, 2017, 5, 3823-3835.	5.8	16
59	Bifunctional dentifrice: Amorphous polyphosphate a regeneratively active sealant with potent anti-Streptococcus mutans activity. Dental Materials, 2017, 33, 753-764.	3.5	17
60	Hydroquinone derivatives from the marine-derived fungus Gliomastix sp.. RSC Advances, 2017, 7, 30640-30649.	3.6	25
61	Fabrication of amorphous strontium polyphosphate microparticles that induce mineralization of bone cells in vitro and in vivo. Acta Biomaterialia, 2017, 50, 89-101.	8.3	37
62	3D printing of hybrid biomaterials for bone tissue engineering: Calcium-polyphosphate microparticles encapsulated by polycaprolactone. Acta Biomaterialia, 2017, 64, 377-388.	8.3	117
63	Polyphosphate as donor of high-energy phosphate for the synthesis of ADP and ATP. Journal of Cell Science, 2017, 130, 2747-2756.	2.0	71
64	Rebalancing Î²-Amyloid-Induced Decrease of ATP Level by Amorphous Nano/Micro Polyphosphate: Suppression of the Neurotoxic Effect of Amyloid Î²-Protein Fragment 25-35. International Journal of Molecular Sciences, 2017, 18, 2154.	4.1	26
65	The Understanding of the Metazoan Skeletal System, Based on the Initial Discoveries with Siliceous and Calcareous Sponges. Marine Drugs, 2017, 15, 172.	4.6	12
66	New 2-Methoxy Acetylenic Acids and Pyrazole Alkaloids from the Marine Sponge Cinachyrella sp.. Marine Drugs, 2017, 15, 356.	4.6	15
67	A Novel Biomimetic Approach to Repair Enamel Cracks/Carious Damages and to Reseal Dentinal Tubules by Amorphous Polyphosphate. Polymers, 2017, 9, 120.	4.5	13
68	Restoration of Impaired Metabolic Energy Balance (ATP Pool) and Tube Formation Potential of Endothelial Cells under â€œhigh glucoseâ€, Diabetic Conditions by the Bioinorganic Polymer Polyphosphate. Polymers, 2017, 9, 575.	4.5	11
69	Morphogenetically-Active Barrier Membrane for Guided Bone Regeneration, Based on Amorphous Polyphosphate. Marine Drugs, 2017, 15, 142.	4.6	4
70	Uptake of polyphosphate microparticles in vitro (SaOS-2 and HUVEC cells) followed by an increase of the intracellular ATP pool size. PLoS ONE, 2017, 12, e0188977.	2.5	25
71	Enhancement of Wound Healing in Normal and Diabetic Mice by Topical Application of Amorphous Polyphosphate. Superior Effect of a Hostâ€"Guest Composite Material Composed of Collagen (Host) and Polyphosphate (Guest). Polymers, 2017, 9, 300.	4.5	30
72	Lactones from the Sponge-Derived Fungus Talaromyces rugulosus. Marine Drugs, 2017, 15, 359.	4.6	32

#	Article	IF	Citations
73	<i>In vitro</i>and<i>in vivo</i>enhancement of osteogenic capacity in a synthetic BMP-2 derived peptide-coated mineralized collagen composite. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, 99-107.	2.7	28
74	Amorphous polyphosphate/amorphous calcium carbonate implant material with enhanced bone healing efficacy in a critical-size defect in rats. Biomedical Materials (Bristol), 2016, 11, 035005.	3.3	37
75	Polyphosphate as a Bioactive and Biodegradable Implant Material: Induction of Bone Regeneration in Rats. Advanced Engineering Materials, 2016, 18, 1406-1417.	3.5	26
76	A bio-imitating approach to fabricate an artificial matrix for cartilage tissue engineering using magnesium-polyphosphate and hyaluronic acid. RSC Advances, 2016, 6, 88559-88570.	3.6	20
77	Mineralization of boneâ€related Sa<scp>OS</scp>â€2 cells under physiological hypoxic conditions. FEBS Journal, 2016, 283, 74-87.	4.7	30
78	A biomimetic approach to ameliorate dental hypersensitivity by amorphous polyphosphate microparticles. Dental Materials, 2016, 32, 775-783.	3.5	14
79	Polyphosphate as a metabolic fuel in Metazoa: A foundational breakthrough invention for biomedical applications. Biotechnology Journal, 2016, 11, 11-30.	3.5	48
80	Targeted solid phase fermentation of the soil dwelling fungus Gymnascella dankaliensis yields new brominated tyrosine-derived alkaloids. RSC Advances, 2016, 6, 81685-81693.	3.6	13
81	Cytotoxic 14-Membered Macrolides from a Mangrove-Derived Endophytic Fungus, <i>Pestalotiopsis microspora</i>. Journal of Natural Products, 2016, 79, 2332-2340.	3.0	74
82	Amorphous polyphosphateâ€"hydroxyapatite: A morphogenetically active substrate for bone-related SaOS-2 cells in vitro. Acta Biomaterialia, 2016, 31, 358-367.	8.3	39
83	High biocompatibility and improved osteogenic potential of amorphous calcium carbonate/vaterite. Journal of Materials Chemistry B, 2016, 4, 376-386.	5.8	73
84	Xanthones and sesquiterpene derivatives from a marine-derived fungus Scopulariopsis sp.. Tetrahedron, 2016, 72, 2411-2419.	1.9	42
85	The morphogenetically active polymer, inorganic polyphosphate complexed with GdCl 3 , as an inducer of hydroxyapatite formation in vitro. Biochemical Pharmacology, 2016, 102, 97-106.	4.4	18
86	Involvement of Aquaporin Channels in Water Extrusion from Biosilica during Maturation of Sponge Siliceous Spicules. Biological Bulletin, 2015, 229, 24-37.	1.8	3
87	Nonenzymatic Transformation of Amorphous CaCO₃ into Calcium Phosphate Mineral after Exposure to Sodium Phosphate in Vitro: Implications for in Vivo Hydroxyapatite Bone Formation. ChemBioChem, 2015, 16, 1323-1332.	2.6	36
88	Back Cover: Macromol. Biosci. 9/2015. Macromolecular Bioscience, 2015, 15, 1324-1324.	4.1	0
89	Porifera Lectins: Diversity, Physiological Roles and Biotechnological Potential. Marine Drugs, 2015, 13, 5059-5101.	4.6	27
90	Modular Small Diameter Vascular Grafts with Bioactive Functionalities. PLoS ONE, 2015, 10, e0133632.	2.5	35

#	Article	IF	Citations
91	A new polyphosphate calcium material with morphogenetic activity. Materials Letters, 2015, 148, 163-166.	2.6	88
92	Polyphosphate: A Morphogenetically Active Implant Material Serving as Metabolic Fuel for Bone Regeneration. Macromolecular Bioscience, 2015, 15, 1182-1197.	4.1	62
93	Cytotoxic acyl amides from the soil fungus Gymnascella dankaliensis. Bioorganic and Medicinal Chemistry, 2015, 23, 712-719.	3.0	23
94	A new printable and durable N,O-carboxymethyl chitosanâ€“Ca²⁺â€“polyphosphate complex with morphogenetic activity. Journal of Materials Chemistry B, 2015, 3, 1722-1730.	5.8	68
95	Amorphous Ca2+ polyphosphate nanoparticles regulate the ATP level in bone-like SaOS-2 cells. Journal of Cell Science, 2015, 128, 2202-2207.	2.0	75
96	Retinol encapsulated into amorphous Ca2+ polyphosphate nanospheres acts synergistically in MC3T3-E1 cells. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 93, 214-223.	4.3	41
97	Tetrahydroanthraquinone Derivatives from the Endophytic Fungus <i>Stemphylium globuliferum</i>. European Journal of Organic Chemistry, 2015, 2015, 2646-2653.	2.4	26
98	Electrospun bioactive mats enriched with Ca-polyphosphate/retinol nanospheres as potential wound dressing. Biochemistry and Biophysics Reports, 2015, 3, 150-160.	1.3	19
99	Development of a morphogenetically active scaffold for three-dimensional growth of bone cells: biosilica-alginate hydrogel for SaOS-2 cell cultivation. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, E39-E50.	2.7	26
100	Potential biological role of laccase from the sponge Suberites domuncula as an antibacterial defense component. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 118-128.	2.4	23
101	The Marine Sponge-Derived Inorganic Polymers, Biosilica and Polyphosphate, as Morphogenetically Active Matrices/Scaffolds for the Differentiation of Human Multipotent Stromal Cells: Potential Application in 3D Printing and Distraction Osteogenesis. Marine Drugs, 2014, 12, 1131-1147.	4.6	54
102	Carbonic anhydrase: a key regulatory and detoxifying enzyme for Karst plants. Planta, 2014, 239, 213-229.	3.2	3
103	In vitro degradation of porous PLLA/pearl powder composite scaffolds. Materials Science and Engineering C, 2014, 38, 227-234.	7.3	49
104	Modulation of the Initial Mineralization Process of SaOS-2 Cells by Carbonic Anhydrase Activators and Polyphosphate. Calcified Tissue International, 2014, 94, 495-509.	3.1	49
105	Enzyme-accelerated and structure-guided crystallization of calcium carbonate: Role of the carbonic anhydrase in the homologous system. Acta Biomaterialia, 2014, 10, 450-462.	8.3	21
106	Enzymatically Synthesized Inorganic Polymers as Morphogenetically Active Bone Scaffolds. International Review of Cell and Molecular Biology, 2014, 313, 27-77.	3.2	42
107	Characterization and osteogenic activity of a silicatein/biosilica-coated chitosan-graft-polycaprolactone. Acta Biomaterialia, 2014, 10, 4456-4464.	8.3	28
108	Engineering a morphogenetically active hydrogel for bioprinting of bioartificial tissue derived from human osteoblast-like SaOS-2 cells. Biomaterials, 2014, 35, 8810-8819.	11.4	160

#	Article	IF	Citations
109	Bioactive and biodegradable silica biomaterial for bone regeneration. Bone, 2014, 67, 292-304.	2.9	108
110	Biosilicaâ€loaded poly(Ïµâ€caprolactone) nanofibers mats provide a morphogenetically active surface scaffold for the growth and mineralization of the osteoclastâ€related SaOSâ€2 cells. Biotechnology Journal, 2014, 9, 1312-1321.	3.5	33
111	Isoquercitrin and polyphosphate co-enhance mineralization of human osteoblast-like SaOS-2 cells via separate activation of two RUNX2 cofactors AFT6 and Ets1. Biochemical Pharmacology, 2014, 89, 413-421.	4.4	33
112	Enzyme-based biosilica and biocalcite: biomaterials for the future in regenerative medicine. Trends in Biotechnology, 2014, 32, 441-447.	9.3	65
113	Molecular cross-talk between sponge host and associated microbes. Phytochemistry Reviews, 2013, 12, 369-390.	6.5	13
114	Metazoan Circadian Rhythm: Toward an Understanding of a Light-Based Zeitgeber in Sponges. Integrative and Comparative Biology, 2013, 53, 103-117.	2.0	7
115	Silica as a morphogenetically active inorganic polymer. Biomaterials Science, 2013, 1, 669.	5.4	31
116	Biologically induced transition of bio-silica sol to mesoscopic gelatinous flocs: a biomimetic approach to a controlled fabrication of bio-silica structures. Soft Matter, 2013, 9, 654-664.	2.7	21
117	Hierarchical composition of the axial filament from spicules of the siliceous sponge Suberites domuncula: from biosilica-synthesizing nanofibrils to structure- and morphology-guiding triangular stems. Cell and Tissue Research, 2013, 351, 49-58.	2.9	12
118	The enzyme carbonic anhydrase as an integral component of biogenic Caâ€carbonate formation in sponge spicules. FEBS Open Bio, 2013, 3, 357-362.	2.3	29
119	Induction of carbonic anhydrase in SaOS-2 cells, exposed to bicarbonate and consequences for calcium phosphate crystal formation. Biomaterials, 2013, 34, 8671-8680.	11.4	60
120	The silicatein propeptide acts as inhibitor/modulator of selfâ€organization during spicule axial filament formation. FEBS Journal, 2013, 280, 1693-1708.	4.7	10
121	Silicateinsâ€"A Novel Paradigm in Bioinorganic Chemistry: Enzymatic Synthesis of Inorganic Polymeric Silica. Chemistry - A European Journal, 2013, 19, 5790-5804.	3.3	61
122	Alginate/silica composite hydrogel as a potential morphogenetically active scaffold for three-dimensional tissue engineering. RSC Advances, 2013, 3, 11185.	3.6	52
123	Principles of Biofouling Protection in Marine Sponges: A Model for the Design of Novel Biomimetic and Bio-inspired Coatings in the Marine Environment?. Marine Biotechnology, 2013, 15, 375-398.	2.4	47
124	Inorganic Polymers: Morphogenic Inorganic Biopolymers for Rapid Prototyping Chain. Progress in Molecular and Subcellular Biology, 2013, 54, 235-259.	1.6	5
125	Selfâ€healing, an intrinsic property of biomineralization processes. IUBMB Life, 2013, 65, 382-396.	3.4	10
126	Nocturnin in the demosponge Suberites domuncula: a potential circadian clock protein controlling glycogenin synthesis in sponges. Biochemical Journal, 2012, 448, 233-242.	3.7	17

#	Article	IF	Citations
127	Electrical properties of <i>in vitro</i> biomineralized recombinant silicatein deposited by microfluidics. Applied Physics Letters, 2012, 101, 193702.	3.3	4
128	Potentiation of the Cytotoxic Activity of Copper by Polyphosphate on Biofilm-Producing Bacteria: A Bioinspired Approach. Marine Drugs, 2012, 10, 2369-2387.	4.6	13
129	Genetic, biological and structural hierarchies during sponge spicule formation: from soft solâ€“gels to solid 3D silica composite structures. Soft Matter, 2012, 8, 9501.	2.7	68
130	Biosilica. Advances in Marine Biology, 2012, 62, 231-271.	1.4	27
131	Silicate modulates the crossâ€talk between osteoblasts (SaOSâ€2) and osteoclasts (RAW 264.7 cells): Inhibition of osteoclast growth and differentiation. Journal of Cellular Biochemistry, 2012, 113, 3197-3206.	2.6	95
132	Bio-silica and bio-polyphosphate: applications in biomedicine (bone formation). Current Opinion in Biotechnology, 2012, 23, 570-578.	6.6	91
133	Flashing light in sponges through their siliceous fiber network: A new strategy of â€œneuronal transmissionâ€•in animals. Science Bulletin, 2012, 57, 3300-3311.	1.7	10
134	Differential Expression of the Demosponge (Suberites domuncula) Carotenoid Oxygenases in Response to Light: Protection Mechanism Against the Self-Produced Toxic Protein (Suberitine). Marine Drugs, 2012, 10, 177-199.	4.6	9
135	Dual effect of inorganic polymeric phosphate/polyphosphate on osteoblasts and osteoclasts in vitro. Journal of Tissue Engineering and Regenerative Medicine, 2012, 7, n/a-n/a.	2.7	32
136	Bioâ€Sintering/Bioâ€Fusion of Silica in Sponge Spicules. Advanced Engineering Materials, 2012, 14, B4.	3.5	7
137	Front Cover Advanced Materials 3/2012. Advanced Engineering Materials, 2012, 14, n/a-n/a.	3.5	0
138	From nanoparticles via microtemplates and milliparticles to deep-sea nodules: biogenically driven mineral formation. Frontiers of Materials Science, 2012, 6, 97-115.	2.2	2
139	Silicatein-Mediated Polycondensation of Orthosilicic Acid: Modeling of a Catalytic Mechanism Involving Ring Formation. Silicon, 2012, 4, 33-38.	3.3	44
140	Distribution of Microfossils Within Polymetallic Nodules: Biogenic Clusters Within Manganese Layers. Marine Biotechnology, 2012, 14, 96-105.	2.4	18
141	Common Genetic Denominators for Ca++-Based Skeleton in Metazoa: Role of Osteoclast-Stimulating Factor and of Carbonic Anhydrase in a Calcareous Sponge. PLoS ONE, 2012, 7, e34617.	2.5	27
142	The Unique Invention of the Siliceous Sponges: Their Enzymatically Made Bio-Silica Skeleton. Progress in Molecular and Subcellular Biology, 2011, 52, 251-281.	1.6	12
143	Hardening of bio-silica in sponge spicules involves an aging process after its enzymatic polycondensation: Evidence for an aquaporin-mediated water absorption. Biochimica Et Biophysica Acta - General Subjects, 2011, 1810, 713-726.	2.4	27
144	Interaction of the retinoic acid signaling pathway with spicule formation in the marine sponge Suberites domuncula through activation of bone morphogenetic protein-1. Biochimica Et Biophysica Acta - General Subjects, 2011, 1810, 1178-1194.	2.4	27

#	Article	IF	Citations
145	Silintaphinâ€1â€ƒâ€“â€ƒinteraction with silicatein during structureâ€guiding bioâ€silica formation. FEBS Journal, 2011, 278, 1145-1155.	4.7	68
146	Tubulin polymerization promoting protein (TPPP) ortholog from Suberites domuncula and comparative analysis of TPPP/p25 gene family. Biologia (Poland), 2011, 66, 111-120.	1.5	4
147	Inorganic polymeric phosphate/polyphosphate as an inducer of alkaline phosphatase and a modulator of intracellular Ca2+ level in osteoblasts (SaOS-2 cells) in vitro. Acta Biomaterialia, 2011, 7, 2661-2671.	8.3	131
148	Biosilica-glass formation using enzymes from sponges [silicatein]: Basic aspects and application in biomedicine [bone reconstitution material and osteoporosis]. Frontiers of Materials Science, 2011, 5, 266-281.	2.2	7
149	Sponge Biosilica Formation Involves Syneresis Following Polycondensation in vivo. ChemBioChem, 2011, 12, 2316-2324.	2.6	24
150	Complex structures â€" smart solutions: Formation of siliceous spicules. Communicative and Integrative Biology, 2011, 4, 684-688.	1.4	3
151	Evagination of Cells Controls Bio-Silica Formation and Maturation during Spicule Formation in Sponges. PLoS ONE, 2011, 6, e20523.	2.5	23
152	Osteogenic Potential of Biosilica on Human Osteoblast-Like (SaOS-2) Cells. Calcified Tissue International, 2010, 87, 513-524.	3.1	110
153	Silicatein-mediated incorporation of titanium into spicules from the demosponge Suberites domuncula. Cell and Tissue Research, 2010, 339, 429-436.	2.9	17
154	Flashing light signaling circuit in sponges: Endogenous light generation after tissue ablation in <i>Suberites domuncula</i>. Journal of Cellular Biochemistry, 2010, 111, 1377-1389.	2.6	22
155	Morphology of Sponge Spicules: Silicatein a Structural Protein for Bioâ€Silica Formation. Advanced Engineering Materials, 2010, 12, B422.	3.5	29
156	Bioinspired Fabrication of Bioâ€Silicaâ€Based Boneâ€Substitution Materials. Advanced Engineering Materials, 2010, 12, B438.	3.5	21
157	NanoSIMS: Insights into the Organization of the Proteinaceous Scaffold within Hexactinellid Sponge Spicules. ChemBioChem, 2010, 11, 1077-1082.	2.6	30
158	Inside Cover: NanoSIMS: Insights into the Organization of the Proteinaceous Scaffold within Hexactinellid Sponge Spicules (ChemBioChem 8/2010). ChemBioChem, 2010, 11, 1002-1002.	2.6	0
159	The role of biosilica in the osteoprotegerin/RANKL ratio in human osteoblast-like cells. Biomaterials, 2010, 31, 7716-7725.	11.4	138
160	A cryptochromeâ€based photosensory system in the siliceous sponge <i>Suberitesâ€ƒdomuncula</i> (Demospongiae). FEBS Journal, 2010, 277, 1182-1201.	4.7	45
161	Demosponge EST Sequencing Reveals a Complex Genetic Toolkit of the Simplest Metazoans. Molecular Biology and Evolution, 2010, 27, 2747-2756.	8.9	45
162	Symbiotic Interaction Between Dinoflagellates and the Demosponge Lubomirskia baicalensis: Aquaporin-Mediated Glycerol Transport. Progress in Molecular and Subcellular Biology, 2009, 47, 145-170.	1.6	10

#	Article	IF	Citations
163	Biogenic Origin of Polymetallic Nodules from the Clarion-Clipperton Zone in the Eastern Pacific Ocean: Electron Microscopic and EDX Evidence. Marine Biotechnology, 2009, 11, 99-108.	2.4	39
164	The role of the silicatein-Î± interactor silintaphin-1 in biomimetic biomineralization. Biomaterials, 2009, 30, 1648-1656.	11.4	65
165	Manganese/polymetallic nodules: Micro-structural characterization of exolithobiontic- and endolithobiontic microbial biofilms by scanning electron microscopy. Micron, 2009, 40, 350-358.	2.2	31
166	Contribution of biomineralization during growth of polymetallic nodules and ferromanganese crusts from the Pacific Ocean. Frontiers of Materials Science in China, 2009, 3, 109-123.	0.5	20
167	Luciferase a light source for the silica-based optical waveguides (spicules) in the demosponge Suberites domuncula. Cellular and Molecular Life Sciences, 2009, 66, 537-552.	5.4	43
168	Organized bacterial assemblies in manganese nodules: evidence for a role of S-layers in metal deposition. Geo-Marine Letters, 2009, 29, 85-91.	1.1	25
169	Sponge spicules as blueprints for the biofabrication of inorganicâ€“organic composites and biomaterials. Applied Microbiology and Biotechnology, 2009, 83, 397-413.	3.6	126
170	Evidence for biogenic processes during formation of ferromanganese crusts from the Pacific Ocean: Implications of biologically induced mineralization. Micron, 2009, 40, 526-535.	2.2	27
171	Bio-sintering processes in hexactinellid sponges: Fusion of bio-silica in giant basal spicules from Monorhaphis chuniâ˜†. Journal of Structural Biology, 2009, 168, 548-561.	2.8	45
172	Paleoclimate and Evolution: Emergence of Sponges During the Neoproterozoic. Progress in Molecular and Subcellular Biology, 2009, 47, 55-77.	1.6	4
173	Sustainable Exploitation and Conservation of the Endemic Lake Baikal Sponge (Lubomirskia baicalensis) for Application in Nanobiotechnology. Progress in Molecular and Subcellular Biology, 2009, 47, 383-416.	1.6	2
174	Cloning and expression of a tauropine dehydrogenase from the marine sponge Suberites domuncula. Marine Biology, 2008, 153, 1219-1232.	1.5	6
175	Silicatein expression in the hexactinellid Crateromorpha meyeri: the lead marker gene restricted to siliceous sponges. Cell and Tissue Research, 2008, 333, 339-351.	2.9	73
176	Regional and modular expression of morphogenetic factors in the demosponge Lubomirskia baicalensis. Micron, 2008, 39, 447-460.	2.2	11
177	Poly(silicate)â€metabolizing silicatein in siliceous spicules and silicasomes of demosponges comprises dual enzymatic activities (silica polymerase and silica esterase). FEBS Journal, 2008, 275, 362-370.	4.7	91
178	Bioorganic/inorganic hybrid composition of sponge spicules: Matrix of the giant spicules and of the comitalia of the deep sea hexactinellid Monorhaphis. Journal of Structural Biology, 2008, 161, 188-203.	2.8	78
179	Axial growth of hexactinellid spicules: Formation of cone-like structural units in the giant basal spicules of the hexactinellid Monorhaphis. Journal of Structural Biology, 2008, 164, 270-280.	2.8	29
180	The 2â€²-5â€²-oligoadenylate synthetase in the lowest metazoa: isolation, cloning, expression and functional activity in the sponge Lubomirskia baicalensis. Molecular Immunology, 2008, 45, 945-953.	2.2	32

#	Article	IF	Citations
181	Biofabrication of biosilica-glass by living organisms. Natural Product Reports, 2008, 25, 455.	10.3	191
182	Mitochondrial genome of Suberites domuncula: Palindromes and inverted repeats are abundant in non-coding regions. Gene, 2008, 412, 1-11.	2.2	26
183	Identification of a silicatein(-related) protease in the giant spicules of the deep-sea hexactinellid<i>Monorhaphis chuni</i>. Journal of Experimental Biology, 2008, 211, 300-309.	1.7	37
184	Silicateins, the major biosilica forming enzymes present in demosponges: Protein analysis and phylogenetic relationship. Gene, 2007, 395, 62-71.	2.2	74
185	Functional Polymerâ€Opals from Coreâ€“Shell Colloids. Macromolecular Rapid Communications, 2007, 28, 1987-1994.	3.9	32
186	Fractal-related assembly of the axial filament in the demosponge Suberites domuncula: Relevance to biomineralization and the formation of biogenic silica. Biomaterials, 2007, 28, 4501-4511.	11.4	53
187	Cold stress defense in the freshwater sponge Lubomirskiaâ€ƒbaicalensis. FEBS Journal, 2007, 274, 23-36.	4.7	41
188	Analysis of the axial filament in spicules of the demosponge Geodia cydonium: Different silicatein composition in microscleres (asters) and megascleres (oxeas and triaenes). European Journal of Cell Biology, 2007, 86, 473-487.	3.6	49
189	Morphogenetic Activity of Silica and Bio-silica on the Expression of Genes Controlling Biomineralization Using SaOS-2 Cells. Calcified Tissue International, 2007, 81, 382-393.	3.1	53
190	Enzymatic production of biosilica glass using enzymes from sponges: basic aspects and application in nanobiotechnology (material sciences and medicine). Die Naturwissenschaften, 2007, 94, 339-359.	1.6	81
191	Formation of giant spicules in the deep-sea hexactinellid Monorhaphis chuni (Schulze 1904): electron-microscopic and biochemical studies. Cell and Tissue Research, 2007, 329, 363-378.	2.9	74
192	Isolation and characterization of Wnt pathway-related genes from Poriferaâ˜†. Cell Biology International, 2007, 31, 939-949.	3.0	53
193	Kahalalide Derivatives from the Indian Sacoglossan MolluskElysiagrandifolia. Journal of Natural Products, 2006, 69, 1547-1553.	3.0	117
194	Magnetic resonance imaging of the siliceous skeleton of the demosponge Lubomirskia baicalensis. Journal of Structural Biology, 2006, 153, 31-41.	2.8	30
195	The stem cell concept in sponges (Porifera): Metazoan traits. Seminars in Cell and Developmental Biology, 2006, 17, 481-491.	5.0	73
196	Siliceous spicules in marine demosponges (example Suberites domuncula). Micron, 2006, 37, 107-120.	2.2	115
197	Molecular control of serial module formation along the apicalâ€“basal axis in the sponge Lubomirskia baicalensis: silicateins, mannose-binding lectin and mago nashi. Development Genes and Evolution, 2006, 216, 229-242.	0.9	56
198	Novel photoreception system in sponges?. Biosensors and Bioelectronics, 2006, 21, 1149-1155.	10.1	74

#	Article	IF	Citations
199	Novel mechanism for the radiation-induced bystander effect: Nitric oxide and ethylene determine the response in sponge cells. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2006, 597, 62-72.	1.0	19
200	From Single Molecules to Nanoscopically Structured Functional Materials. Materials Research Society Symposia Proceedings, 2006, 988, 1.	0.1	0
201	Daminin, a bioactive pyrrole alkaloid from the Mediterranean sponge Axinella damicornis. Tetrahedron, 2005, 61, 7266-7270.	1.9	29
202	Expression of silicatein in spicules from the Baikalian sponge. Cell Biology International, 2005, 29, 943-951.	3.0	16
203	Selenium affects biosilica formation in the demosponge Suberites domuncula. FEBS Journal, 2005, 272, 3838-3852.	4.7	32
204	Mineralization of SaOS-2 cells on enzymatically (silicatein) modified bioactive osteoblast-stimulating surfaces. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2005, 75B, 387-392.	3.4	86
205	Innate immune defense of the sponge Suberites domuncula against gram-positive bacteria: induction of lysozyme and AdaPTin. Marine Biology, 2005, 146, 271-282.	1.5	45
206	Dynamics of skeleton formation in the Lake Baikal sponge Lubomirskia baicalensis. Part I. Biological and biochemical studies. Die Naturwissenschaften, 2005, 92, 128-133.	1.6	28
207	Formation of siliceous spicules in the marine demosponge Suberites domuncula. Cell and Tissue Research, 2005, 321, 285-297.	2.9	164
208	Biosilica formation in spicules of the sponge Suberites domuncula: Synchronous expression of a gene cluster. Genomics, 2005, 85, 666-678.	2.9	35
209	Expression pattern of the Brachyury and Tbx2 homologues from the sponge Suberites domuncula. Biology of the Cell, 2005, 97, 641-650.	2.0	19
210	Porifera a reference phylum for evolution and bioprospecting: the power of marine genomics. Keio Journal of Medicine, 2004, 53, 159-165.	1.1	15
211	Differentiation capacity of epithelial cells in the sponge Suberites domuncula. Cell and Tissue Research, 2004, 316, 271-280.	2.9	51
212	Molecular/chemical ecology in sponges: evidence for an adaptive antibacterial response in Suberites domuncula. Marine Biology, 2004, 144, 19-29.	1.5	32
213	Evolution of Metazoan Cell Junction Proteins: The Scaffold Protein MAGI and the Transmembrane Receptor Tetraspanin in the Demosponge Suberites domuncula. Journal of Molecular Evolution, 2004, 59, 41-50.	1.8	36
214	Allograft rejection in the mixed cell reaction system of the demosponge Suberites domuncula is controlled by differential expression of apoptotic genes. Immunogenetics, 2004, 56, 597-610.	2.4	23
215	Bauplan of Urmetazoa: Basis for Genetic Complexity of Metazoa. International Review of Cytology, 2004, 235, 53-92.	6.2	120
216	Polarity factor â€˜Frizzledâ€™ in the demospongeSuberites domuncula: identification, expression and localization of the receptor in the epithelium/pinacoderm1. FEBS Letters, 2003, 554, 363-368.	2.8	86

#	Article	IF	Citations
217	Expression of silicatein and collagen genes in the marine sponge Suberites domuncula is controlled by silicate and myotrophin. FEBS Journal, 2000, 267, 4878-4887.	0.2	279
218	Evolutionary relationships of Metazoa within the eukaryotes based on molecular data from Porifera. Proceedings of the Royal Society B: Biological Sciences, 1999, 266, 63-73.	2.6	75
219	A Microplate Assay for DNA Damage Determination (Fast Micromethod)in Cell Suspensions and Solid Tissues. Analytical Biochemistry, 1999, 270, 195-200.	2.4	57
220	Inorganic Polyphosphate in Human Osteoblast-like Cells. Journal of Bone and Mineral Research, 1998, 13, 803-812.	2.8	113
221	Organization and expression of the chum salmon insulin-like growth factor II gene. FEBS Letters, 1997, 416, 344-348.	2.8	22
222	Changes in metabolism of inorganic polyphosphate in rat tissues and human cells during development and apoptosis. Biochimica Et Biophysica Acta - General Subjects, 1997, 1335, 51-60.	2.4	66
223	A Novel Method for Determination of Inorganic Polyphosphates Using the Fluorescent Dye Fura-2. Analytical Biochemistry, 1997, 246, 176-184.	2.4	23
224	Anti-HIV-1 Activity of Inorganic Polyphosphates. Journal of Acquired Immune Deficiency Syndromes, 1997, 14, 110-118.	0.3	60
225	Inorganic polyphosphates in the developing freshwater sponge <i>Ephydatia muelleri</i>: Effect of stress by polluted waters. Environmental Toxicology and Chemistry, 1996, 15, 1329-1334.	4.3	30
226	Purification and characterization of two exopolyphosphatases from the marine sponge Tethya lyncurium. Biochimica Et Biophysica Acta - General Subjects, 1995, 1245, 17-28.	2.4	32
227	gp120 of HIV-1 induces apoptosis in rat cortical cell cultures: prevention by memantine. European Journal of Pharmacology, 1992, 226, 209-214.	2.6	174
228	Susceptibility of Primary Human Glial Fibrillary Acidic Protein-Positive Brain Cells to Human Immunodeficiency Virus Infection In Vitro: Anti-HIV Activity of Memantine. AIDS Research and Human Retroviruses, 1991, 7, 89-95.	1.1	27
229	Bleomycin, an Antibiotic That Removes Thymine from Double-Stranded DNA. Progress in Molecular Biology and Translational Science, 1977, 20, 21-57.	1.9	84
230	INHIBITION OF HERPESVIRUS DNA SYNTHESIS BY 9-?-D-ARABINOFURANOSYLADENINE IN CELLULAR AND CELL-FREE SYSTEMS. Annals of the New York Academy of Sciences, 1977, 284, 34-48.	3.8	117
231	Bleomycin-sensitivity test: Application for human squamous cell carcinoma. Cancer, 1977, 40, 2787-2791.	4.1	11
232	Potentiation of the effectiveness of bleomycin by AÂ·T-specific DNA ligands in vitro as well as in vivo. Cancer Letters, 1975, 1, 127-132.	7.2	12
233	Action of Bleomycin on DNA and RNA. FEBS Journal, 1972, 31, 518-525.	0.2	180
234	Action of 1-Î²-d-Arabinofuranosylcytosine on mammalian tumor cellsâ€"1.. European Journal of Cancer, 1972, 8, 391-396.	0.9	54

#	Article	IF	Citations
235	Activity and kinetics of DNA dependent DNA and RNA polymerases in xeroderma pigmentosum and in normal human skin. Archives of Dermatological Research, 1971, 240, 334-341.	1.9	8